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DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
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PRELIMINARY ENVIRONMENTAL REVIEW

Division/Bureau Environmental Sciences Division/Solid & Hazardous Waste Bureau
Project or Application Draft Montana Hazardous Waste Permit, Exxon Co. U.S.A. Billings Refinery
Description of Project A draft comprehensive permit has been prepared to allow Exxon Co. U.S.A. Billings Refinery to treat, store, and dispose of hazardous waste generated at the refinery. All waste management activities will take place on refinery property. The activities include land treatment, treatment in an open tank, and container storage. The activities have been ongoing for a number of years under a temporary permit, and the comprehensive permit will place more conditions on operations and monitoring. See the attached fact sheet for more information. PER comments are attached on separate pages.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity and distribution			X			X
3. Geology & soil quality, stability and moisture			X			X
4. Vegetation cover, quantity and quality			X			X
5. Aesthetics			X			X
6. Air quality			X			X
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy			X			X
9. Historical and archaeological sites					X	X



POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Social structures and mores				X		X
2. Cultural uniqueness and diversity				X		X
3. Local and state tax base & tax revenue				X		X
4. Agricultural or industrial production				X		X
5. Human health			X			X
6. Quantity and distribution of community and personal income				X		
7. Access to and quality of recreational and wilderness activities				X		
8. Quantity and distribution of employment				X		
9. Distribution and density of population and housing				X		
10. Demands for government services			X			X
11. Industrial & commercial activity			X			X
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Environmental Protection Agency, Water Quality

Bureau, Air Quality Bureau

Individuals or groups contributing to this PER. Alice Stanley, Barbara Jones

Recommendation concerning preparation of EIS not recommended; the process of preparing a comprehensive permit application addresses physical environmental concerns

PER Prepared by: Alice Stanley, Barbara Jones

Date: August 12, 1988



PRELIMINARY ENVIRONMENTAL REVIEW
EXXON COMPANY U.S.A. BILLINGS REFINERY
DRAFT HAZARDOUS WASTE PERMIT

POTENTIAL IMPACT ON THE PHYSICAL ENVIRONMENT

1. Terrestrial and aquatic habitats: The proposed permit conditions will provide improved protection of aquatic and terrestrial species by requiring:

- Monitoring of Coulson irrigation ditch for contaminants before it leaves the facility boundary.

- Closure of any land treatment sectors located in areas of high groundwater. This will reduce the possibility of near surface groundwater from discharging contaminants to nearby swampy areas.

All units are outside of the Yellowstone River floodplain. The land treatment units have been diked to control run-on and run-off during a 25-year, 24-hour storm event.

2. Water quality, quantity, and distribution: There is a potential for impact on groundwater quality due to the land treatment units. Monitor well networks are in place around both land treatment units, and are sampled on a regular basis for hazardous constituents that could migrate from the units. No hazardous constituents have been detected to date in groundwater.

The proposed permit conditions will reduce the potential for groundwater contamination because:

- Groundwater monitoring parameters are increased to include hazardous indicator parameters.

- Soil pore water and soils monitoring frequency and parameters will be increased and standardized.

- Waste application rates and content will be limited, and reported on a more frequent basis.

- Closure and post-closure monitoring requirements will be outlined.

3. Geology and soil quality, stability, and moisture: There is a potential impact on soil quality in the land treatment units due to waste applications. Conservative application rates are established and soil sampling is required in the draft permit, to prevent overloading of soils.

The proposed permit conditions will improve soil quality in some parts of the facility through closure activities:

- Some portions of the east land treatment unit contain soils contaminated below the treatment zone. The proposed permit contains conditions require the excavation and treatment of those soils to reduce levels of hazardous constituents.



-Closure conditions in the proposed permit require in-place treatment and monitoring of land treatment unit soils until maximum degradation of hazardous organic constituents is achieved.

4. Vegetation cover, quantity, and quality: It is likely that EPA's land disposal restrictions will require Exxon to close the land treatment units within two years. Following in-place treatment at closure, a post-closure permit condition requires placement and maintenance of a vegetative cover on the land treatment areas. This condition can be expected to improve vegetative cover.

5. Aesthetics: All hazardous waste management units are located on the Exxon Refinery property. Any anticipated impacts these units may have on aesthetics is minor relative to other refinery activities.

6. Air quality: Both the land treatment units and the lead weathering tank may have a minor odor impact. However, the impact compared to air emissions and odors from the refinery is minor.

7. Unique, endangered, fragile, or limited environmental resources: Exxon has corresponded with the U.S. Fish and Wildlife Service regarding the possible occurrence of the bald eagle and the peregrine falcon in the project area. The potential for accumulation of hazardous constituents in fish or birds that may serve as prey species for the raptors does not appear to be likely. Exxon has taken the agency's comments into account when revising the permit application.

8. Demands on environmental resources of land, water, air, and energy: Although the land treatment process requires about 29 acres, this is property that would otherwise be used for industrial purposes. All the waste management processes are generally energy efficient.

9. Historical and archaeological sites: Exxon has corresponded with the Montana Historical Society about the potential impact of ongoing waste management activities on historic or archaeological sites. The historical society responded that since the waste management processes have been in place for a number of years, "adverse impacts to any cultural resources located in the area have already occurred if they are going to occur." Issuance of the comprehensive permit will not have any additional impact.

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

1-4. Social structures, cultural uniqueness, tax base and revenue, agricultural or industrial production: Hazardous waste management practices are now only a small part of ongoing industrial activity at Exxon. Issuance of a



comprehensive hazardous waste permit will not have an impact on the refinery in general, and therefore will not have an appreciable impact on community life.

5. Human health: Regulating the hazardous waste management units at Exxon through a comprehensive permit may improve human health in the community and at the refinery. Conditions written into the permit will reduce the likelihood of accidental contaminant releases to the environment.

10. Demands for government services: Although Exxon has a mutual aid agreement with the City of Billings Fire Department for services during emergencies, any city fire control materials used must be repaid in kind by Exxon. The agreement states that city personnel and equipment can be withdrawn to respond to another emergency within the city's jurisdiction. Additionally, Exxon has its own fire and emergency brigade, and mutual aid agreements with other local refineries.

Permitting Exxon's hazardous waste management units may increase the workload for state Health Department and EPA personnel.

11. Industrial and commercial activity: The permit will allow industrial activity to maintain its present capacity at the refinery because of reduced uncertainty about waste management options.



DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES



TED SCHWINDEN, GOVERNOR

COGSWELL BUILDING

STATE OF MONTANA

HELENA, MONTANA 59620

FACT SHEET

EXXON COMPANY, U.S.A. BILLINGS REFINERY
Hazardous Waste Treatment/Storage/Disposal Draft Permit
August 12, 1988

BACKGROUND

In 1976, Congress enacted the Resource Conservation and Recovery Act, also known as RCRA. In 1984, The Solid and Hazardous Waste Bureau of the Montana Department of Health and Environmental Sciences (DHES) was authorized by the EPA to manage the hazardous waste program in Montana. The act gives the DHES and EPA authority to manage hazardous wastes by:

- (1) Developing standards to be followed by generators, transporters, and facilities which treat, store, and dispose of hazardous waste;
- (2) Allowing enforcement of regulatory standards for such facilities through a permitting process.

In 1980, the Exxon Billings Refinery filed notice with EPA for an "interim status" or temporary permit to treat, store, and dispose of hazardous refinery wastes. The temporary permit required Exxon to inform EPA of the amount and type of hazardous waste generated and processed, to describe and map the facility, and to issue annual updates. Installation of a groundwater monitoring system for treatment and disposal units was also required. Hazardous waste management activities have continued under the temporary permit since then.

In November 1982, EPA requested submittal of a comprehensive permit application, or a "Part B" application, from Exxon. This permit application was submitted by Exxon in September, 1983. Since that time, both EPA and DHES have conducted reviews and deficiency notices of the application. Exxon has responded in turn with revisions, additions, and information from new studies. With the issuance of the draft permit, DHES deems the application to be complete.

The comprehensive draft permit imposes additional requirements on Exxon for hazardous waste operations, monitoring, closure, and reporting. The specific conditions of the draft permit provide greater protection to the public health and environment than the general terms of the temporary permit under which Exxon has been operating.



FACILITY DESCRIPTION

The Exxon Billings Refinery processes primarily heavy crude oil and produces an array of fuel products. The refinery has been operating at the Billings location since July 1949, and has a demonstrated processing capacity of 50,000 barrels/day.

The refinery currently produces a variety of hazardous wastes as a result of the refining process. The major wastes by volume are:

- API separator sludge (from the wastewater treatment system)
- slop oil emulsion solids (from the wastewater treatment system)
- sludges from the bottom of crude, intermediate, and product tanks
- acid tar from the alkylation unit

Other hazardous wastes, such as spent solvents, oil contaminated soils, and spent filters are generated in small volumes.

Hazardous wastes generated at the refinery are managed through three separate processes, depending on the type of waste. These are land treatment, weathering of leaded tank bottoms, and container storage.

Land Treatment Units

Land treatment of refinery wastes has been used in the United States since the 1970s. It has been demonstrated to be an effective technology, if it is operated and monitored carefully. Exxon has been land treating wastes since 1980.

The largest volume of hazardous waste generated at Exxon goes to the land treatment units. In the last three years, an average of 1300 tons/year of hazardous waste generated by the wastewater treatment system have been treated in this way. The wastes are comprised mainly of water, oil, and dirt.

Currently, about twenty acres are being used for land treatment. The wastes are spread onto specially maintained cultivated fields, designated as the East and South Land Treatment Units on the attached map. With controlled application rates, tillage, liming, and fertilizer, the oily wastes are broken down biologically. Micro-organisms in the topsoil utilize the organic compounds in the wastes as a food source and break them down in time to carbon dioxide, water, and soil humus. Metals in the wastes are not degraded, but are immobilized within the first foot or two of soil, and do not migrate into deeper soils or into groundwater.

In order to guard against inadvertent contamination of deeper soils or groundwater, the draft permit requires routine sampling of soils, groundwater, and soil-pore water in and around the land treatment units. If contamination is discovered below a five foot depth, or is detected in groundwater, the draft permit requires Exxon to take action to correct the problem and revise operational activities to prevent problems in the future.



When the land treatment units are to be closed, Exxon will be required to treat the soils to maximize degradation, then place topsoil over the units and seed the areas. Groundwater and soils will continue to be monitored, although less frequently, for thirty years after closure.

Lead Weathering Tank

The draft permit allows Exxon to treat sludges from the bottom of leaded gasoline tanks in an open, above-ground tank (see attached map). The tank, constructed in 1983, is placed on an asphalt pad which is underlain by a leak detection system and a PVC liner. The pad allows for detection and containment of spills or leaks from the tank. The treatment process "weathers" or oxidizes the organic lead to a less toxic inorganic form. It also evaporates water from the waste, thereby decreasing its volume. After leaded bottoms are weathered for several months, the residue is removed to drums and shipped out of state to a hazardous waste disposal facility.

Leaded tank bottoms are generated infrequently, only when Exxon cleans out a leaded gasoline tank. In the last three years, an average of approximately 70 tons/year of leaded tank bottoms have been treated.

Waste Staging Area

The waste staging area is used to process and store containers of hazardous wastes such as spent solvents and acid tars from the alkylation process. All hazardous wastes stored here are ultimately shipped to an offsite hazardous waste disposal facility. The waste staging area contains a palletized drum storage pad with a non-discharging sump, a drum crusher pad, a safety building, and segregated storage areas for specific wastes. The palletized storage pad and drum crusher pad both have secondary containment, provided by a reinforced concrete pads with six inch curbing and non-discharging sumps. The concrete pads and sumps are underlain with PVC liners. The maximum capacity of the 100' x 100' pad is 250 drums.

CONDITIONS

All conditions of the draft permit are based on requirements in Title 16, Chapter 44, ARM. These rules, which mirror federal requirements for obtaining a permit to operate a hazardous waste management facility, are adopted under the Montana Hazardous Waste Act (MHWHA). MHWHA was enacted to implement in Montana the federal hazardous waste program established by RCRA. The permit application, consisting of parts A and B, serves as a basis for the conditions in this draft permit. The facility must be operated as specified in the application and in the conditions of this permit to be in compliance. Permit noncompliance could result in enforcement action or permit termination.



The draft permit contains six "modules" or chapters, that focus on specific concerns:

- Module I -- Standard Conditions
- Module II -- General Facility Conditions
- Module IIIa -- Land Treatment Units
- Module IIIb -- Lead Weathering Tank
- Module IIIc -- Waste Staging Area
- Module IV -- Groundwater Monitoring
- Module V -- Closure/Post-Closure
- Module VI -- Special Conditions
 - Treatment Zone Separation
 - Demonstration

Module VI, Special Conditions, is unique to this draft permit. This module requires Exxon to demonstrate to DHES by October 7, 1988, that portions of the East Land Treatment Units are suitable for land treatment. DHES is concerned that, in some areas of the East Land Treatment Units, the water table is too close to the ground surface, making the area unsuitable for land treatment. Exxon will only be able to use those portions of the East Land Treatment Units which have a satisfactory separation between the treatment zone and the water table.

TERM OF PERMIT

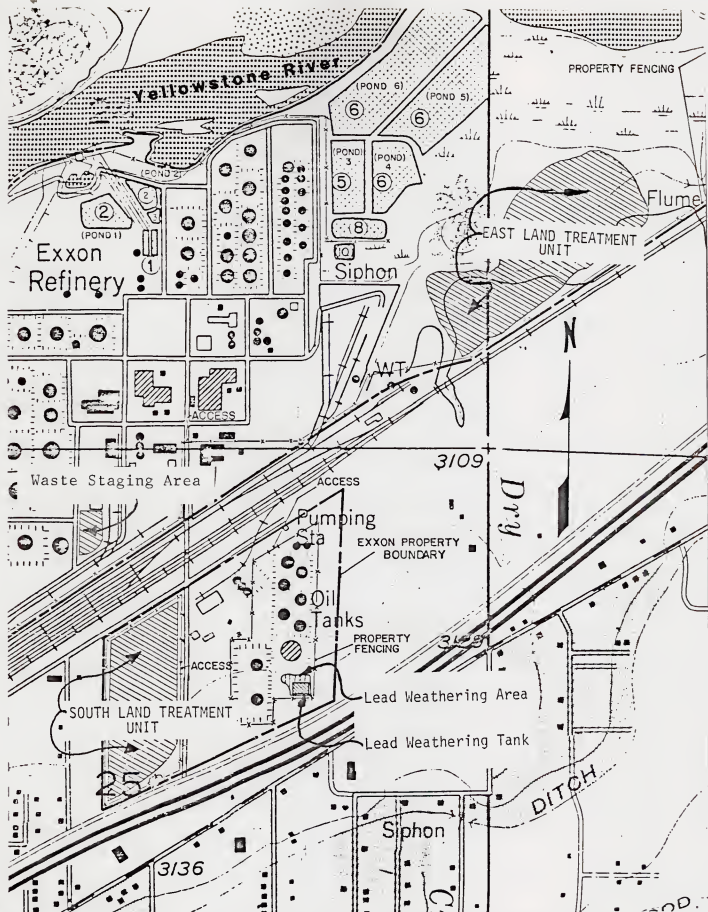
The draft permit proposes a term of ten years for the permit. DHES is required under ARM 16.44.111 to review in detail the portions of the permit that apply to land treatment five years after the date of issuance, and to modify those portions of the permit as necessary.

DHES and Exxon recognize that the land disposal restrictions of the federal 1984 RCRA amendments may prohibit land treatment of refinery wastes beyond 1990. Such restrictions would override Exxon's ability to continue land treatment under a state-issued permit.

PUBLIC PARTICIPATION

MHWA requires a 45-day period for public comment on each draft permit. The public comment period for the Exxon permit will extend through September 26, 1988. A notice will be published in the Billings Gazette and will also be broadcast over local radio stations. A public hearing will be held on September 22, 1988, at the Student Union building on the Eastern Montana College Campus in Billings. The draft permit has been made available for public review during the comment period at the Yellowstone City-County Sanitarian's Office, Room 309, Courthouse (256-2757), and at the Billings office of the Montana Department of Health, Room 305, Petro Hall, Eastern Montana College Campus (657-2618).





Approximate Scale

1000 ft.

EXXON BILLINGS REFINERY

HAZARDOUS WASTE UNITS

8/88



DRAFT FACT SHEET
FOR A HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT
EXXON COMPANY U.S.A., BILLINGS REFINERY
BILLINGS, MONTANA
EPA ID. NO. MTD010380574

This fact sheet is for the Environmental Protection Agency's (EPA's) portion of the full draft Resource Conservation and Recovery Act (RCRA) permit which EPA and the State of Montana intend to issue to the Exxon Company U.S.A., for operation of its storage, treatment, and disposal units located at the Billings, Montana Refinery. The full RCRA permit is comprised of EPA's permit, which addresses the provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the State of Montana's permit, which addresses that portion of RCRA for which the State of Montana is authorized. Some of the provisions in the EPA portion of the permit are also included in the Montana State portion of the permit, since the State of Montana is in the process of amending its hazardous waste regulations to include relevant HSWA requirements. The State of Montana is authorized to administer and enforce those portions of RCRA in effect prior to the enactment of HSWA. This fact sheet was prepared in accordance with the requirements of 40 CFR 124.8.

A. PURPOSE OF THE PERMIT ISSUANCE PROCESS

The purpose of the permit issuance process is to afford the United States Environmental Protection Agency, interested citizens and other governmental agencies the opportunity to evaluate the ability of the Permittee to comply with the applicable requirements promulgated under the Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments of 1984. EPA is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the Agency intends to require the Permittee to comply with during the duration of the permit. The public is given forty-five (45) days to review and comment on the draft permit conditions prior to EPA taking any final action on EPA's draft permit.

B. PROCEDURES FOR REACHING A FINAL DECISION

Section 7004(b) of RCRA and 40 C.F.R. 124.10 require that the public be given forty-five (45) days to comment on each draft permit prepared under the Resource Conservation and Recovery



Act. The comment period will begin on August 12, 1988 and will end on September 26, 1988. Any person interested in commenting on this draft permit must do so within this forty-five (45) day comment period.

All persons wishing to comment on any of the permit conditions should submit the comments in writing to the Environmental Protection Agency (EPA), Region VIII, Montana Office, 301 S. Park, Drawer 10096, Helena, Montana 59626, or to the address in the State permit. Comments should include all reasonably available references, factual grounds and supporting material.

A public hearing will be held at the Student Union Building on the Eastern Montana College Campus in Billings, Montana on August 22, 1988 at 7:00 pm to receive comments on the draft permit.

When making a determination regarding the issuance of this permit to Exxon Company U.S.A., EPA will consider all written comments received during the comment period; oral or written statements received during the public hearing; the requirements of the hazardous waste regulations of 40 C.F.R. Parts 124, 260 through 264, and 270; the Agency's permitting policies; and the HSWA.

When EPA makes a final permit decision to either issue, deny or modify this permit, notice will be given to the applicant and each person who submitted written comments or requested notice of the final decision. The final permit decision shall become effective thirty (30) days after the service of notice of the decision unless a later date is specified or review is requested under 40 C.F.R. 124.19. If no comments requested a change in this draft permit, the final permit shall become effective immediately upon issuance.

Contact person for the Exxon Company U.S.A. draft permit is:

Mr. Jim Harris
U.S. Environmental Protection Agency
Montana Office
301 S. Park, Drawer 10096
Helena, Montana 59626
[406] 449-5414



C. HAZARDOUS AND SOLID WASTE AMENDMENTS

CONTINUING RELEASES AT PERMITTED FACILITIES

Background

One of the most important provisions of the Hazardous and Solid Waste Amendments of 1984 is the requirement for corrective action for continuing releases. This provision is established in Section 3004(u) of RCRA, promulgated as regulation of 40 C.F.R. 264.101, 50 Federal Register 28747 (July 15, 1985), as follows:

"Standards promulgated under this section shall require, and a permit issued after November 8, 1984 (the date of enactment of the Hazardous and Solid Waste Amendments of 1984) by the Administrator or a State shall require corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits issued under Section 3005 (of RCRA) shall contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action."

The intent of Congress in establishing this permit requirement was to correct a perceived shortcoming in the existing statute and RCRA regulations, which allowed operating permits to be issued to facilities at which environmental contamination is occurring or has occurred, without the permit addressing that contamination. All permit applicants must now (a) identify all solid waste management units (SWMUs) at the facility, (b) identify any releases that have occurred or are occurring from those units, (c) take appropriate corrective action to clean up those releases, and (d) demonstrate financial assurance for those corrective actions. The provision on continuing releases was effective on the date of enactment (November 8, 1984). Thus, a permit issued after that date must address this provision.

The basic standard for imposing corrective action at the Exxon Billings Refinery is protection of human health and the environment. The EPA permit will address corrective action when there is or has been a probable release at the facility that poses a threat to human health and the environment. A substantial threat to human health and environment is assumed if there is a likelihood of a hazardous waste or hazardous constituent release from a solid waste management unit into the air, surface water, ground water, or soil.



Implementation

The process of implementing Section 3004(u) will take place in three stages, with each stage consisting of several specific steps, as follows:

1. Assessment of need for corrective action (RCRA Facility Assessment).
 - a. Submission of Preliminary Review information by applicant.
 - b. Evaluation of Preliminary Review information submitted by applicant to determine the possibility or extent of releases.
 - c. Performance of a Visual Site Inspection by the Agency.
2. Existing data evaluation and development of proposed programs of corrective action.
 - a. Verification Investigation by owner/operator to identify or verify releases.
 - b. RCRA Facility Investigation, if necessary, by owner/operator to characterize releases.
 - c. Development of a proposed program of corrective measures, if necessary, and cost estimate.
3. Selecting and performing corrective action.
 - a. Establishing the program for corrective action.
 - b. Demonstration of financial assurance.
 - c. Conducting corrective action.

Information on solid waste management units was developed from state and federal files reviewed by the Agency. This included review of past RCRA Part B application submittals and inspection reports. A Visual Site Inspection was performed at the Exxon Billings Refinery on March 4, 1987. This permit contains conditions requiring Exxon to perform an evaluation of existing solid waste management units and other areas of concern. Once this is completed, EPA will evaluate the completed studies and determine if further action is warranted. If EPA finds that further studies and/or corrective measures are warranted, EPA will propose a permit modification and follow appropriate procedures which will



include a public notice period and a public hearing, if requested.

OTHER PROVISIONS

A number of other provisions in HSWA became effective November 8, 1984. Provisions concerning the standards for owners and operators of hazardous waste management facilities and provisions concerning general permit conditions were promulgated as final regulations on July 15, 1985 (50 Fed. Reg. 28742). One provision, in addition to that pertaining to corrective actions for continuing releases, applies to this permit.

Section 3005(h) of RCRA (Section 224 of HSWA) requires that, as of September 1, 1985, Permittees of hazardous waste management facilities located on the premises of the generator must certify that certain waste minimization practices have been established. This requirement has been incorporated into the regulations concerning the Operating Record of the facility [40 C.F.R. 264.73(b)(9)] (see Permit Condition I.F.). Regulation 40 C.F.R. 270.30(j)(2), 50 Fed. Reg. 18752 (July 15, 1985), was revised to clarify that this operating standard must be a condition of the Permit (see Permit Conditions I.H.2 and I.I.7.b.).

D. FACILITY DESCRIPTION

GENERAL

The Exxon Billings Refinery is located on approximately 730 acres, three miles east of Billings, Montana in Yellowstone County. The Refinery is located at latitude 45° 48' 58" and longitude 108° 26' 02", and is bounded on the north and partially to the west by the Yellowstone River.

The facility is a petroleum refinery which processes, treats, and transforms crude oil and other raw materials into refined hydrocarbon products, by-products, and intermediates. The facility primarily processes heavy domestic crude oil, with varying quantities of light Canadian crude, to a complete line of fuel products. The refinery began operation in July 1949 demonstrating a capacity of processing about 50,000 barrels per stream day [B/SD] of crude oil.

Process units operating at this facility include:



- Crude Distillation Unit [Atmospheric]
- Crude Distillation Unit [Vacuum]
- Fluid Catalytic Cracking Unit
- Fluid Coking Unit
- Hydrocracking Unit
- Powerforming Unit [Platinum Catalyst]
- Catalytic Reforming Unit [Hydrogen Production]
- Hydrodesulfurization of Diesel [HF #1]
- Hydrodesulfurization of Naphtha/Kerosene [HF #2]
- Hydrodesulfurization of Naphtha/Kerosene [HF #3]
- Alkylation Unit [Hydrogen Fluoride Catalyst]
- Saturate Light Ends Unit
- Unsaturate Light Ends Unit
- Virgin Naphtha Stabilizer

HAZARDOUS WASTE ACTIVITIES

Hazardous waste activities at the Exxon Billings Refinery are described in and regulated by the State of Montana's permit. Please refer to the State permit for information on these units: the drum storage area; the lead weathering tank; and the East and South Land Treatment Units.

SOLID WASTE MANAGEMENT UNITS

As part of the RCRA permit, EPA Region VIII proposes to regulate solid waste management units subject to the corrective action provision of HSWA. Solid waste management units (SWMUs) are any active or inactive unit at the facility from which hazardous waste or hazardous waste constituents might migrate, irrespective of when waste was placed in the unit or whether that unit was intended for the management of solid and/or hazardous wastes.

EPA Region VIII has completed a preliminary evaluation of the SWMUs at the facility based on (1) the RCRA permit application and related correspondence; (2) a Visual Site Inspection conducted on March 4, 1987 by representatives of EPA Region VIII; (3) a RCRA Facility Assessment report prepared by EPA Region VIII; and (4) RCRA Facility Assessment Guidance dated October 1986.

Forty one SWMU's and seven areas of concern were defined during this process. Included in the 41 SWMU's are 26 active units and 15 inactive units. The name and identifying number of the SWMU's and areas of concern are given in Table 1. Figure 1 illustrates the approximate location of the SWMU's on the facility.

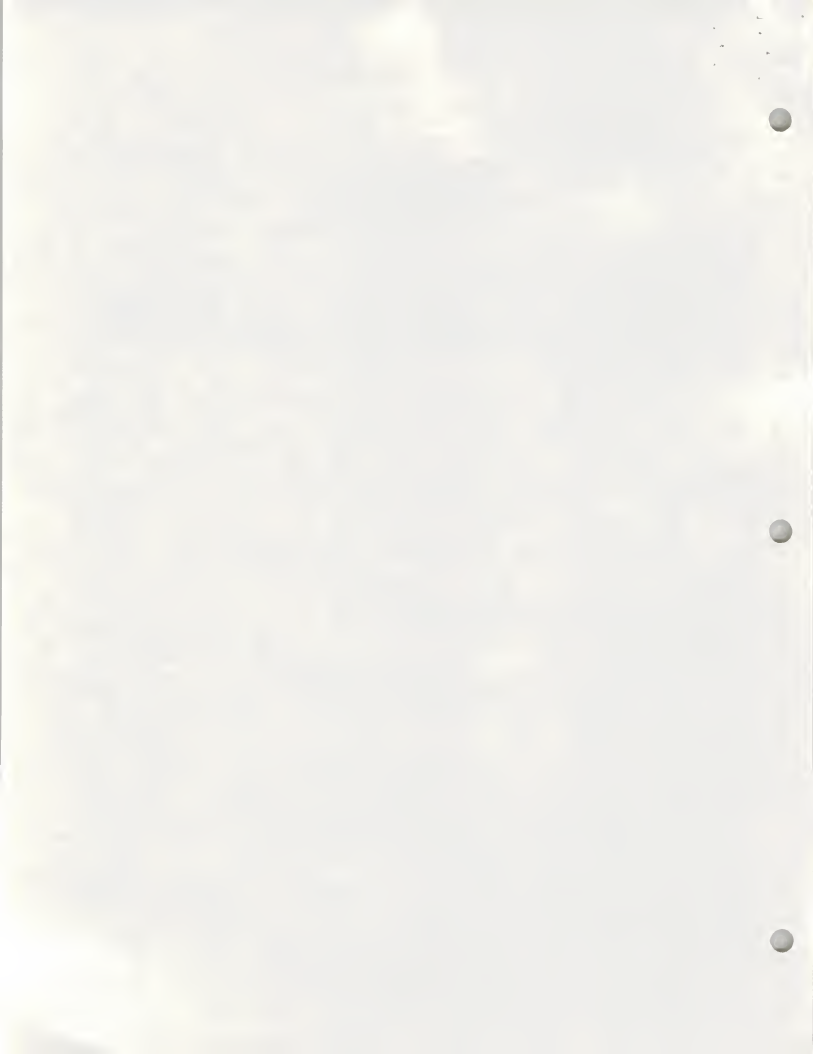


E. PERMIT ORGANIZATION

The permit is divided into two parts as outlined below:

<u>Part</u>	<u>Topic</u>
I	Standard Conditions
II	Specific Conditions

Part I contains conditions which apply to all hazardous waste facilities. Part II pertains specifically to the hazardous waste facilities at the Exxon Billings Refinery, Billings, Montana. Both Parts I and II are administered by EPA.



Unit Number

Name

1	East land Treatment Area
2	South Land Treatment Area
3	Waste Staging Area
4	Lead Weathering Tank
5	HF Neutralization Tank
6	API Separator (Dirty Water Separator)
7	Product Loading Area API Separator
8, 9, 10	Slop Oil Storage Tanks
11	Induced Air Flotation Unit
12	IAF Wastewater Trench
13	Biological Oxidation Pond (Pond #3)
14, 15, 16	Wastewater Stabilization Ponds #4, #5, & #6
17	Pond #1
18	API Overflow Surface Impoundment
19	Clean Water Separator
20	Pond #2
21	Pond #2
22, 23	HF Sludge Settling Ponds
24	HF Sludge Drying Bed
25, 26	Oil Interceptor Trenches

Inactive SWMUs:

27, 28, 29, 30, 31	North Land Disposal Sites
32	Northwest Land Disposal Area
33	Oily Waste Incineration Area
34	Old Surface Impoundment Site
35	Flare Gas Recovery Surface Impoundment Site
36	Coke Storage Area Surface Impoundment Site
37	East Land Disposal Area
38, 39	South Land Disposal Sites
40	Old Lead Weathering Area
41	Rotary Kiln

Areas of Concern:

1	River Water Intake Pond
2	Clean Rubble Area
3	Product Coke Storage Area
4	Flare Stack
5, 6, 7	Underground Storage Tanks

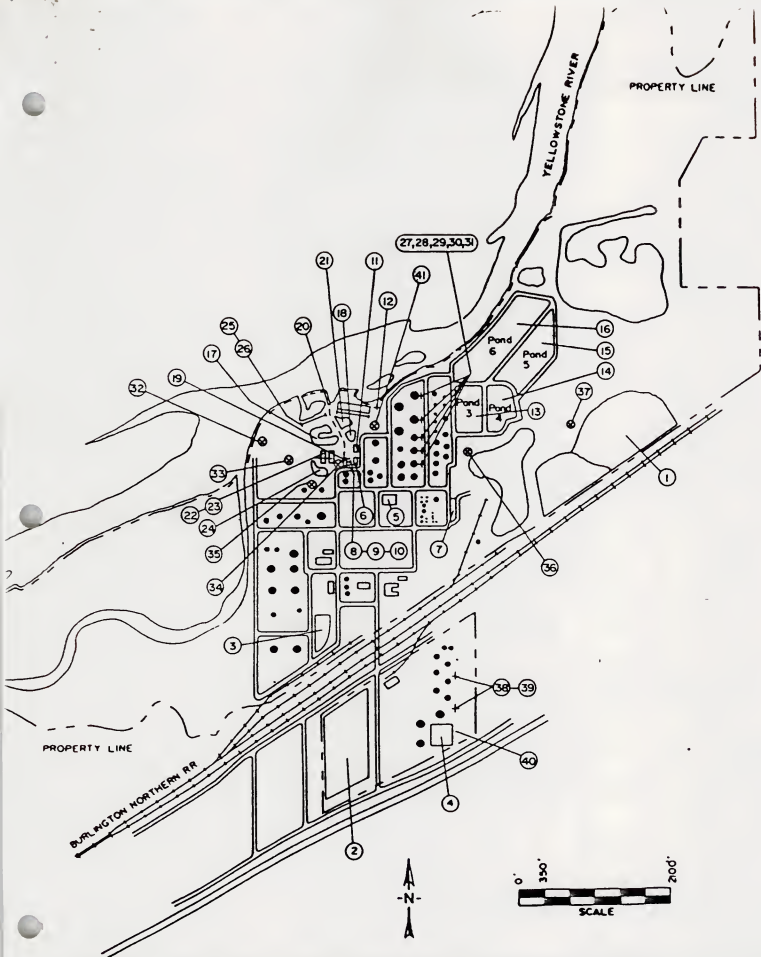


FIGURE 1. APPROXIMATE LOCATION OF ACTIVE AND INACTIVE SWMUs AT EXXON BILLINGS REFINERY.

